

Abstract

A network management system, and a method of, centrally provisioning a full transport LSP mesh and a full targeted LDP signaling session mesh in support of VPN services provisioning are provided. A network management system repository tracks Provider
5 Edge nodes (PE) having label switch router functionality, transport LSP meshes and targeted LDP session meshes. The method includes selecting PE nodes for inclusion in a node group, identifying PE node pairs, and issuing commands to paired PE nodes to commission managed transport LSPs and targeted LDP signaling sessions. The advantages are derived from the full mesh LSP content transport provisioning and
10 targeted LDP signaling session provisioning effected in a centralized network management context enabling service providers to: assure network resiliency, assure service quality, and provide accounting, in respect of Layer-2 and Layer-3 VPN services irrespective of client side deployed infrastructure while leveraging installed infrastructure in the service provider communications network core. Additional
15 advantages are derived from increased operations management personnel productivity while reducing the probability of human error compared to manual provisioning thereof enabling wide availability of VPN services.